

at least one element fabricated of heat conductive material, said element being separate from said poles and said winding, said element being disposed between at least one of said poles and its encircling winding and extending along the length and the width of that pole.

12. (amended) The rotor of claim 1 wherein said element includes a pair of mating members, each member extending over a different non-overlapping region between the rotor pole and its encircling winding.

13. (amended) Electrical equipment comprising

a housing;

a stationary winding; and

a rotor, said rotor including at least one pair of poles with a winding encircling each pole, each pole having a length and a width; and

at least one element fabricated of heat conductive material, said element being separate from said poles and said winding, said element being disposed between at least one of said poles and its encircling winding and extending along the length and the width of that pole.

17. (amended) A method of cooling a rotor for electrical equipment, said rotor having at least one pair of poles and a winding encircling each pole and each pole having a length and a width, said method comprising the steps of

providing at least one element fabricated of heat conductive material; and

disposing said element between each rotor pole and its encircling winding, said element extending along the length and width of that rotor pole.

Add the following new claims:

18. (new) The rotor of claim 1 wherein said element extends along the entire length and width of said at least one of said poles.

19 (new) The rotor of claim 1 wherein said element encircles said at least one of the poles.

20. (new) The electrical equipment of claim 13 wherein said element extends along the entire length and width of said at least one of said poles.

21. (new) The electrical equipment of claim 13 wherein said element encircles said at least one of the poles.

22. (new) The method of claim 17 wherein said element extends along the entire length and width of said at least one of said poles.

22. (new) The method of claim 17 wherein said element encircles said at least one of the poles.

23. (new) The rotor of claim 10 wherein said wire is solid.

24. (new) A rotor for electrical equipment, said rotor having at least one pair of poles and comprising
a winding encircling each of said poles; and
at least one element fabricated of heat conductive material separate from said pole and said winding disposed between at least one of said poles and its encircling winding, said element

having a bend so as to wrap around and extend along two dimensions of that pole, said dimensions intersecting with one another and forming a nonzero angle therebetween.

REMARKS

The allowability of claim 9 is noted.

Claims 1-8, 11 and 13-17 were rejected under 35 U.S.C. 102(b) as being anticipated by Brinkman (U.S. Patent No. 3,715,610). Applicant has amended the independent claims and, for the same reasons set forth below, this rejection is believed overcome.

Applicant's invention relates to a rotor cooling arrangement in which at least one cooling element is disposed between a rotor pole and its encircling winding. In the preferred embodiment, the cooling element incorporates internal passageways for conducting a cooling medium therethrough. To increase the cooling achievable through the use of such elements, the element extends along both the length and width of the rotor pole. In the preferred embodiment, the cooling element extends along the entire length and width so as to completely encircle the pole.

In the Brinkman reference, a cooling member designated as element 18 is disposed between a rotor pole and the encircling winding. As shown in the drawing figures, and in particular, FIG. 3, this element is planar and extends only along the length of the rotor pole. As a result, it does not provide the cooling benefits of applicant's invention. Indeed, applicant has found a substantial cooling benefit obtained by extending the cooling element along the length and width instead of just the length.